1. Incident Name Dominguez Channel Mystery Oil Spill	2. Operational Period to be covered by IAP (Date/Time) From: 0600 1/14/11 To: 0600 1/28/11	CG IAP COVER SHEET

3. Approved by Incident Commander(s):

ORG	NAME
US EPA	Marty Powell / Jason Musantel
DFG	Sau Garcia #659 / Bryan Gollhofer
LAWPD	Howard Wong
RP/ACTA	Elaine Silvestro

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☒ ICS 202-CG (Response Objectives)
- ☐ ICS 203-CG (Organization List) – OR – ICS 207-CG (Organization Chart)
- ☒ ICS 204-CGs (Assignment Lists)
  One Copy each of any ICS 204-CG attachments:
- ☐ ICS 205-CG (Communications Plan)
- ☒ ICS 206-CG (Medical Plan)
- ☒ ICS 208-CG (Site Safety Plan) or Note SSP Location _____
- ☒ Map/Chart
- ☒ Weather forecast / Tides/Currents

Other Attachments

- ☒ Incident Phone List
- ☒ Waste Segregation and Qualification Plan
- ☒ MSDS
- ☒ Emergency Rain Event Notification
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

4. Prepared by:	Date/Time
J. Pantoja	1//17 0800

1. Incident Name	2. Operational Period (Date/Time)	INCIDENT OBJECTIVES
Dominguez Channel Mystery Oil Spill	From: 1-14-11 0600 To: 1-28-11 0600	ICS 202-CG

3. Objective(s)

- SAFETY: Ensure the safety of all response personnel, facility employees, and public. See site safety plans for specifics

- ISOLATION AND DENY ENTRY: Keep all non response personnel out of response areas.

- NOTIFICATIONS: Notify proper authorities of any significant changes in spill situations.

- ID AND HAZARD ASSESSMENT: See site safety plan.

- ACTION PLANNING: Maintain containment and remove oil at source, pump station and retention basin.

- CONTAINMENT AND CONTROL: Investigate possible sources and control when found.

- PROTECTIVE ACTIONS: Continually assess downstream impacts and potential protecive and recovery options (Marina's).

- DECONTAMINATION AND CLEANUP: Ensure proper decontamination of personnel and equipment.

- DISPOSAL: Dispose of all recovered as waste as law requires. Ensure that attached Waste Segregation Plan is followed.

- DOCUMENTATION: Ensure proper documentation of all response activities, waste and segregation, and costs associated.

4. Operational Period Command Emphasis (Safety Message, Priorities, Key Decisions/Directions)

- SHELL SOURCE AREA:
  - -Obtain Right-of Entry (ACTA).
  - -Mobilize equipment (NRC).
  - -Continue recovery of surface product (NRC).
  - -Contain and segregate waste; keep separate from other wastes (NRC).
- RR ROW OUTFALL RECOVERY:
  - -Mobilized equipment (NRC).
  - -Maintain established temporary sand bag drain and pond.
  - -Continue skimming and recovery efforts to minimze downstream impacts to pump station.
  - -Assess cleanup issues to implement once source has been isolated.
  - -During a rain event initiate call out list and staff as necessary.
- SOURCE INVESTIGATION
  - -Work in conjunction with agencies to determine source.
  - -Once source is found, work with responsible party(ies) to revise IAP.
  - -Additional ICS 204's as needed for new projects to identify source.
- CITY PUMP STATION
  - -Continue recovery of surface water within vault.
  - -Pump down station as needed to reduce water level and reduce possibility of flooding. Portable sump pump as a possibility.
  - -Continue to assess.

Approved Site Safety Plan Located at:

5. Prepared by: (Planning Section Chief)	Date/Time
J. Pantoja	1/17/11 0800

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-CG
Dominguez Channel Mystery Oil Spill	From: 1/14/11 0600 To: 1/28/11 0600	

3. Branch	4. Division/Group/Staging
Recovery Group	Right of Way Trench

5. Operations Personnel

	Name	Affiliation	Contact # (s)
Operations Section Chief:	Steve Pedersen	City of Los Angeles	213-725-6308
Branch Director:	Elaine Silvestro	ACTA	310-650-3359
Division/Group Supervisor/STAM:	NRC Environmental Services Inc.		

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	
Senior Project Mgr	Asher Grimes	310-629-2760	1		☐
Project Accountant			1		☐
Project Manager	Mike Sica	310-628-0725	1		☐
Field Supervisor			2		☐
Vacuum truck driver			2	to be mobilized	☐
Technician			12	to be mobilized	☐
4 Pickup trucks				to be mobilized	☐
2 Gear trucks				to be mobilized	☐
ER Trailer				to be mobilized	☐
Incident Command Trailer				to be mobilized	☐
1 Tractor				to be mobilized	☐

7. Work Assignments

Maintain walls with lessons learned in mind. Widen outfall to allow more retention time.

Recover liquids in vacuum truck.

8. Special Instructions

Build containment with permanency in mind. Keep sandbags segregated from Shell site.
-Read, understand, and follow site safety plan.
-Do not attempt to capture or approach oiled/injured wildlife. Notify an on-site DFG personnel or a member of the Unified Command
-Report all oiled wildlife to Cory Kong @ 562-477-7081
-Refer all media questions and concerns to Martin Powell @ 562-760-7028

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by:	Date/Time	11. Reviewed by (PSC):	Date/Time	12. Reviewed by (OSC):	Date/Time
A. Wilson	1/17/11 0800				

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-CG
Dominguez Channel Mystery Oil Spill	From: 1/14/11 0600 To: 1/28/11 0600	

3. Branch	4. Division/Group/Staging
Recovery Group	Right of Way Trench

5. Operations Personnel

	Name	Affiliation	Contact # (s)
Operations Section Chief:	Steve Pedersen	City of Los Angeles	213-725-6308
Branch Director:	Elaine Silvestro	ACTA	310-650-3359
Division/Group Supervisor/STAM:	NRC Environmental Services Inc.		

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	
1 Vacuum trailer				to be mobilized	☐
1 Generator				Pre-staged	☐
1 Skimmer				Pre-staged	☐
1 Air compressor				Pre-staged	☐
2 - 3" pumps				Pre-staged	☐
12 - 25' hose				Pre-staged	☐
2 light towers				Pre-staged	☐
2 - 4" trash pumps				Pre-staged	☐
8" sorbent boom				Pre-staged	☐
sorbent pads				Pre-staged	☐
visqueen				Pre-staged	☐

7. Work Assignments

Maintain walls with lessons learned in mind. Widen outfall to allow more retention time.

Recover liquids in vacuum truck.

8. Special Instructions

Build containment with permanency in mind. Keep sandbags segregated from Shell site.
-Read, understand, and follow site safety plan.
-Do not attempt to capture or approach oiled/injured wildlife. Notify an on-site DFG personnel or a member of the Unified Command
-Report all oiled wildlife to Cory Kong @ 562-477-7081
-Refer all media questions and concerns to Martin Powell @ 562-760-7028

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by:	Date/Time	11. Reviewed by (PSC):	Date/Time	12. Reviewed by (OSC):	Date/Time
A. Wilson	1/17/11 0800				

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-CG
Dominguez Channel Mystery Oil Spill	From: 1/14/11 0600 To: 1/28/11 0600	

3. Branch	4. Division/Group/Staging
Recovery Group	Right of Way Trench

5. Operations Personnel

	Name	Affiliation	Contact # (s)
Operations Section Chief:	Steve Pedersen	City of Los Angeles	213-725-6308
Branch Director:	Elaine Silvestro	ACTA	310-650-3359
Division/Group Supervisor/STAM:	NRC Environmental Services Inc.		

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	
Pressure washer				To be mobilized	☐
Skidsteer loader				To be mobilized	☐
2 Baker tanks				Pre-staged	☐
Rocket launcher				To be mobilized	☐
Roll off bins				To be mobilized	☐
					☐
					☐
					☐
					☐
					☐
					☐

7. Work Assignments

Maintain walls with lessons learned in mind. Widen outfall to allow more retention time.

Recover liquids in vacuum truck.

8. Special Instructions

Build containment with permanency in mind. Keep sandbags segregated from Shell site.
-Read, understand, and follow site safety plan.
-Do not attempt to capture or approach oiled/injured wildlife. Notify an on-site DFG personnel or a member of the Unified Command
-Report all oiled wildlife to Cory Kong @ 562-477-7081
-Refer all media questions and concerns to Martin Powell @ 562-760-7028

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by:	Date/Time	11. Reviewed by (PSC):	Date/Time	12. Reviewed by (OSC):	Date/Time
A. Wilson	1/17/11 0800				

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-CG
Dominguez Channel Mystery Oil Spill	From: 1/14/11 0600 To: 1/28/11 0600	

3. Branch	4. Division/Group/Staging
Recovery Group	Shell Source Area

5. Operations Personnel

	Name	Affiliation	Contact # (s)
Operations Section Chief:	Steve Pedersen	City of Los Angeles	213-725-6308
Branch Director:	Elaine Silvestro	ACTA	310-650-3359
Division/Group Supervisor/STAM:	NRC Environmental Services Inc.		

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	
500 bbl baker tank					☐
1 vac truck operator					☐
1 tech					☐
1 tractor					☐
1 vacuum trailer					☐
					☐
					☐
					☐
					☐
					☐
					☐

7. Work Assignments

Maintain walls with lessons learned in mind. Widen outfall to allow more retention time.

Recover liquids in vacuum truck.

8. Special Instructions

Build containment with permanency in mind. Keep sandbags segregated from Shell site.
-Read, understand, and follow site safety plan.
-Do not attempt to capture or approach oiled/injured wildlife. Notify an on-site DFG personnel or a member of the Unified Command
-Report all oiled wildlife to Cory Kong @ 562-477-7081
-Refer all media questions and concerns to Martin Powell @ 562-760-7028

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by:	Date/Time	11. Reviewed by (PSC):	Date/Time	12. Reviewed by (OSC):	Date/Time
A. Wilson	1/17/11 0800				

1. Incident Name	2. Operational Period (Date/Time)	Assignment List
Dominguez Channel Mystery Oil Spill	From: 0600 1/21/11 To: 0600 1/28/11	**ICS 204-CG**

3. Branch	4. Division/Group/Staging
Recovery Group	**City Outfall Pump**

5. Operations Personnel

	Name	Affiliation	Contact # (s)
Operations Section Chief:	Steve Pedersen	City of Los Angeles	213-725-6308
Branch Director:	Elaine Silvestro	ACTA	310-650-3359
Division/Group Supervisor/STAM:	Mike Sica	NRC Environmental Services	310-628-0725

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# of Persons	Reporting Info/Notes/Remarks	
1 Supervisor			2	ACTA	☐
6" pump					☐
Absorbent boom					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐

7. Work Assignments

Continue utilizing pads and sorbent boom to remove sheen and oil and maintain passive cleaning operations. Man the pump Monday thru Friday at 0800; 1500; 2400 and on Saturday and Sunday at 0800 and 2000.

8. Special Instructions

All discharge must be monitored. Working near water. Wear life jackets.
- Read, understand, and follow site safety plan.
- Do not attempt to capture or approach oiled/injured wildlife. Notify an on-site DFG personnel or a member of the Unified Command.
- Report all oiled wildlife to Cory Kong @ 562-477-7081
- Refer all media questions and concerns to Martin Powell @ 562-760-7028

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by	Date/Time	11. Reviewed by (PSC)	Date/Time	12. Reviewed by (OSC)	Date/Time
A. Wilson	1/24/11 0800				

1. Incident Name: Dominguez Mystery Oil Spill	4. Operational Period: From: 0600 1/14/11 To: 0600 1/28/11	MEDICAL PLAN ICS 206 - EPA

5. Incident Medical Aid Station

Medical Aid Stations	Location	Paramedics Yes	Paramedics No

6. Transportation

A. Ambulance Services

Name	Address	Phone	Paramedics Yes	Paramedics No
South County Medical Transport	228 E. Pacific Coast Highway, Long Beach	562-599-0659	X	

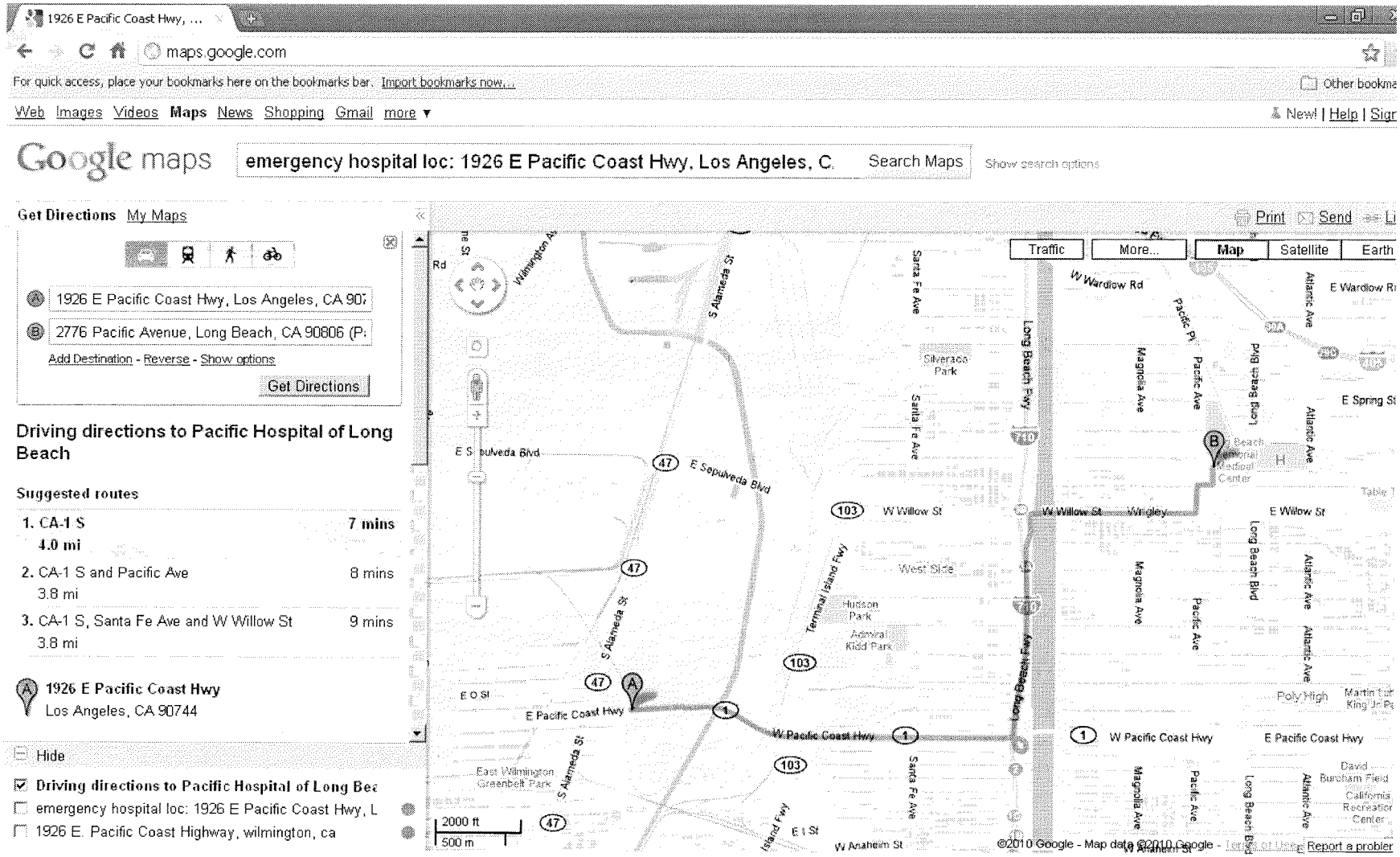
B. Incident Ambulances

7. Hospitals

Name	Address	Travel Time Air	Travel Time Ground	Phone	Helipad Yes	Helipad No	Burn Center Yes	Burn Center No
Pacific Hospital of Long Beach	2776 Pacific Ave. Long Beach 90806		24	562-997-2000		X		X

8. Medical Emergency Procedures

9. Prepared by (Medical Unit Leader)	Date/Time	10. Reviewed by (Safety Officer)	Date/Time
J. Pantoja	1/17/11		

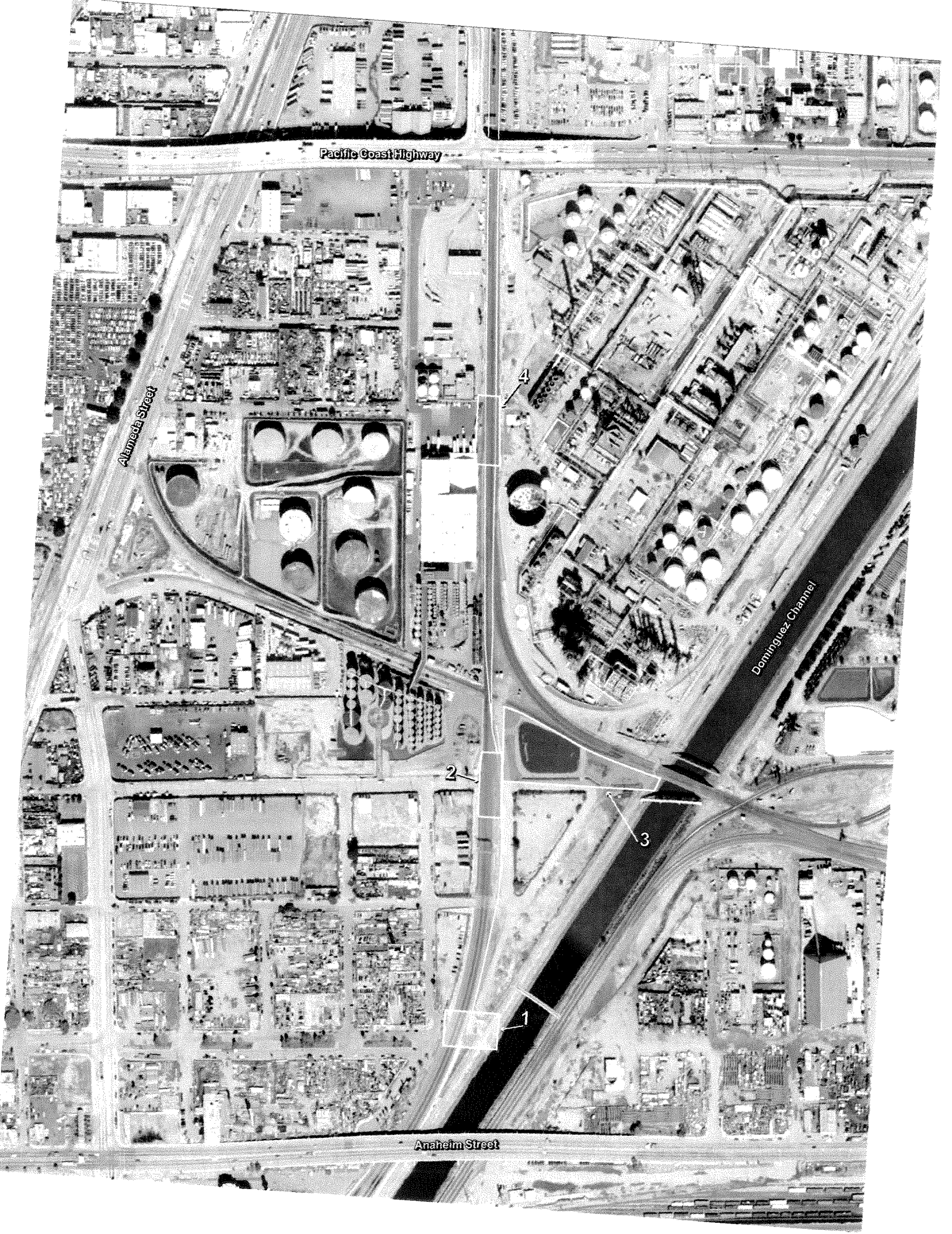

1926 E Pacific Coast Hwy, ...
maps.google.com
For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now...
Web Images Videos Maps News Shopping Gmail more
Google maps
emergency hospital loc: 1926 E Pacific Coast Hwy, Los Angeles, C.
Search Maps
Show search options
Get Directions My Maps
1926 E Pacific Coast Hwy, Los Angeles, CA 907
2776 Pacific Avenue, Long Beach, CA 90806 (P
Add Destination - Reverse - Show options
Get Directions
Driving directions to Pacific Hospital of Long Beach
Suggested routes
1. CA-1 S 7 mins
4.0 mi
2. CA-1 S and Pacific Ave 8 mins
3.8 mi
3. CA-1 S, Santa Fe Ave and W Willow St 9 mins
3.8 mi
1926 E Pacific Coast Hwy
Los Angeles, CA 90744
Hide
Driving directions to Pacific Hospital of Long Bea
emergency hospital loc: 1926 E Pacific Coast Hwy, L
1926 E. Pacific Coast Highway, wilmington, ca
Print Send
Traffic More... Map Satellite Earth
E Pacific Coast Hwy
W Pacific Coast Hwy
W Willow St
E Willow St
E Sepulveda Blvd
W Wardlow Rd
E Wardlow Rd
E Spring St
Long Beach Fwy
Santa Fe Ave
Magnolia Ave
Pacific Ave
Atlantic Ave
Long Beach Blvd
S Alameda St
Terminal Island Fwy
Silverado Park
West Side
Hudson Park
Admiral Kidd Park
East Wilmington Greenbelt Park
Wrigley
Poly High
2000 ft
500 m
©2010 Google - Map data ©2010 Google -
Report a problem

1. Incident Name	2. Prepared by: (name) Sau Garcia	INCIDENT BRIEFING
Dominguez Channel Mystery Oil Spill	Date: 01/27/2011 Time: 2100	ICS 201-CG

3. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)

4. Current Situation:

- Source of crude oil is unknown and is an on going investigation
- Source is believed to be traveling through the ballast of the Alameda Corridor
- Containment and recovery are currently in place at Shell Source Area, Right of Way Trench, and at the City Outfall Pump.


Pacific Coast Highway
Alameda Street
Dominguez Channel
Anaheim Street
1
2
3
4

NEWS
WEATHER
SPORTS
MOVIES & EVENTS
RESTAURANTS
GAS & TRAFFIC

MAPS & DIRECTIONS

LOCAL DIRECTORY
Beauty salons
Child care services
Florists
Government & community
Hotels & motels
Shopping
Sports & recreation
Weekly sales
MORE...

LOCAL SERVICES
Trip planner
Auto classifieds
Dating & personals
Jobs
Travel deals
Real estate listings
White pages
Yellow pages

WORLD WEATHER
Beijing, CHN
London, GBR
Paris, FRA
Tokyo, JPN
Buenos Aires, ARG
Madrid, ESP
Rome, ITA
Toronto, CAN
New Delhi, IND
Moscow, RUS
Sydney, AUS
Vancouver, CAN

Local Weather

PROVIDED BY iMap

Hourly | 5-day °F °C

Ten-day forecast

High Surf Advisory

Day	Forecast	Description	Precip Chance
Today Jan 18 Details	Sunny (Clear) Hi:**75°** Lo:**52°**	**Day:** Sunny. High 75F. Winds SW at 6 mph. Air Quality:Good, UV Index:4	0%
		Night: Fair. Low 52F. Light winds.	0%
Wednesday Jan 19 Details	Mostly Sunny Hi:**67°** Lo:**51°**	**Day:** Mostly Sunny. High 67F. Winds W at 8 mph. Air Quality:Good, UV Index:3	0%
		Night: Clear. Low 51F. Winds N at 3 mph.	0%
Thursday Jan 20	Mostly Sunny Hi:**69°** Lo:**49°**	Mostly Sunny. High 69F. Winds E at 9 mph. Air Quality:NA, UV Index:3	0%
Friday Jan 21	Mostly Sunny Hi:**66°** Lo:**50°**	Mostly Sunny. High 66F and low 50F. Winds W at 7 mph. Air Quality:NA, UV Index:4	0%
Saturday Jan 22	Mostly Sunny Hi:**60°** Lo:**48°**	Mostly Sunny. High 60F and low 48F. Winds SW at 7 mph. Air Quality:NA, UV Index:NA	0%

More weather services from

Find Maps and average temperatures

Compare forecasts from multiple weather providers

Find international weather forecasts for

Sunday Jan 23	Mostly Sunny Hi:**64°** Lo:**48°**	Mostly Sunny. High 64F and low 48F. Winds W at 6 mph. Air Quality:NA, UV Index:NA	0%
Monday Jan 24	Mostly Sunny Hi:**62°** Lo:**53°**	Mostly Sunny. High 62F and low 53F. Winds W at 5 mph. Air Quality:NA, UV Index:NA	0%
Tuesday Jan 25	Sunny (Clear) Hi:**67°** Lo:**56°**	Sunny. High 67F and low 56F. Winds W at 7 mph. Air Quality:NA, UV Index:NA	0%
Wednesday Jan 26	Mostly Sunny Hi:**67°** Lo:**58°**	Mostly Sunny. High 67F and low 58F. Winds NW at 4 mph. Air Quality:NA, UV Index:NA	0%
Thursday Jan 27	Sunny (Clear) Hi:**66°** Lo:**57°**	Sunny. High 66F and low 57F. Winds NW at 4 mph. Air Quality:NA, UV Index:NA	0%

Air Quality data provided by AIRNow

Weather Video

2011 NOAA Tide Predictions: Long Beach, Terminal Island

(Reference station: Los Angeles, Corrections Applied: Times: High -0 hr. 1 min., Low 0 hr. 0 min., Heights: High *1.01, Low *1.01)

January - Long Beach, Terminal Island

Date	Day	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
01/01/2011	Sat	06:27AM LST	6.5	H	01:49PM LST	-1.0	L	08:19PM LST	3.8	H					
01/02/2011	Sun	12:52AM LST	2.1	L	07:11AM LST	6.6	H	02:29PM LST	-1.2	L	08:59PM LST	3.9	H		
01/03/2011	Mon	01:38AM LST	2.1	L	07:51AM LST	6.6	H	03:06PM LST	-1.2	L	09:35PM LST	4.0	H		
01/04/2011	Tue	02:19AM LST	2.0	L	08:29AM LST	6.4	H	03:41PM LST	-1.1	L	10:09PM LST	4.1	H		
01/05/2011	Wed	02:58AM LST	2.0	L	09:06AM LST	6.2	H	04:14PM LST	-0.8	L	10:42PM LST	4.1	H		
01/06/2011	Thu	03:37AM LST	2.0	L	09:40AM LST	5.8	H	04:45PM LST	-0.5	L	11:15PM LST	4.1	H		
01/07/2011	Fri	04:18AM LST	2.1	L	10:14AM LST	5.4	H	05:15PM LST	-0.1	L	11:49PM LST	4.1	H		
01/08/2011	Sat	05:02AM LST	2.2	L	10:49AM LST	4.7	H	05:44PM LST	0.3	L					
01/09/2011	Sun	12:25AM LST	4.2	H	05:55AM LST	2.2	L	11:27AM LST	4.1	H	06:13PM LST	0.8	L		
01/10/2011	Mon	01:04AM LST	4.2	H	07:03AM LST	2.3	L	12:14PM LST	3.4	H	06:43PM LST	1.3	L		
01/11/2011	Tue	01:48AM LST	4.3	H	08:37AM LST	2.1	L	01:29PM LST	2.8	H	07:16PM LST	1.7	L		
01/12/2011	Wed	02:39AM LST	4.4	H	10:22AM LST	1.7	L	03:50PM LST	2.5	H	08:02PM LST	2.1	L		
01/13/2011	Thu	03:34AM LST	4.7	H	11:34AM LST	1.2	L	06:01PM LST	2.6	H	09:15PM LST	2.4	L		
01/14/2011	Fri	04:28AM LST	5.0	H	12:21PM LST	0.5	L	07:03PM LST	2.9	H	10:33PM LST	2.5	L		
01/15/2011	Sat	05:17AM LST	5.4	H	12:59PM LST	0.0	L	07:39PM LST	3.2	H	11:35PM LST	2.5	L		
01/16/2011	Sun	06:02AM LST	5.9	H	01:34PM LST	-0.6	L	08:09PM LST	3.5	H					
01/17/2011	Mon	12:26AM LST	2.3	L	06:45AM LST	6.3	H	02:08PM LST	-1.0	L	08:38PM LST	3.7	H		
01/18/2011	Tue	01:12AM LST	2.0	L	07:27AM LST	6.6	H	02:42PM LST	-1.3	L	09:09PM LST	4.0	H		
01/19/2011	Wed	01:56AM LST	1.7	L	08:08AM LST	6.8	H	03:17PM LST	-1.5	L	09:41PM LST	4.2	H		
01/20/2011	Thu	02:42AM LST	1.5	L	08:51AM LST	6.7	H	03:52PM LST	-1.4	L	10:16PM LST	4.5	H		
01/21/2011	Fri	03:31AM LST	1.3	L	09:35AM LST	6.4	H	04:28PM LST	-1.1	L	10:53PM LST	4.7	H		
01/22/2011	Sat	04:23AM LST	1.2	L	10:22AM LST	5.9	H	05:05PM LST	-0.7	L	11:33PM LST	4.9	H		
01/23/2011	Sun	05:22AM LST	1.2	L	11:13AM LST	5.0	H	05:42PM LST	-0.1	L					
01/24/2011	Mon	12:18AM LST	5.2	H	06:31AM LST	1.2	L	12:14PM LST	4.1	H	06:23PM LST	0.6	L		
01/25/2011	Tue	01:09AM LST	5.3	H	07:56AM LST	1.1	L	01:35PM LST	3.3	H	07:09PM LST	1.3	L		
01/26/2011	Wed	02:09AM LST	5.3	H	09:34AM LST	0.8	L	03:33PM LST	2.8	H	08:10PM LST	1.9	L		
01/27/2011	Thu	03:18AM LST	5.4	H	11:03AM LST	0.3	L	05:36PM LST	2.9	H	09:36PM LST	2.3	L		
01/28/2011	Fri	04:28AM LST	5.6	H	12:09PM LST	-0.2	L	06:51PM LST	3.3	H	11:01PM LST	2.4	L		
01/29/2011	Sat	05:30AM LST	5.8	H	01:00PM LST	-0.6	L	07:38PM LST	3.6	H					
01/30/2011	Sun	12:07AM LST	2.2	L	06:23AM LST	6.0	H	01:41PM LST	-0.9	L	08:14PM LST	3.8	H		
01/31/2011	Mon	12:58AM LST	2.0	L	07:07AM LST	6.1	H	02:17PM LST	-1.0	L	08:44PM LST	4.0	H		

All times are listed in Local Standard Time(LST) or, Local Daylight Time (LDT) (when applicable). All heights are in feet referenced to Mean Lower Low Water (MLLW).

Date: 12/29/2010

First Name	Last Name	Agency	Phone #
James	Foto	DFG/OSPR	562-598-4292
Michael	Caliguire	USCG PST	415-798-4521
Howard	Wong	LA WPD	213-725-6313
Erik	Ricardo	DBES	909-499-6959
Franmcisco	Arcaute	USEPA	213-798-1404
Mike	Mejia	BBRI	310-863-0860
Brett	Bernstein	Shell	213-494-6598
Dean	Persinger	OLBI	562-624-3284
Charlie	Waters	OLBI	562-900-2347
Randy	Stuart		310-863-0912
David	Duthie		714-553-0246
Elaine	Silvestro	ACTA	310-650-3359
Anastasia	Norris	DFG/OSPR	310-310-9917
Adam	Smith	EPA START	310-405-2393
Sau	Garcia	OSPR	562-843-2714
Dion	Coluso	LA WPD	213-494-6598
Eric	Lee	LA WPD	213-725-6313
Bryan	Gollhoffer	OSPR	562-708-7757
Robert	Wise	USEPA	562-889-2572
Tom	Williams	Fire marshal	562-425-1902
Gonzalo	Barriga	LA WPD	213-725-8862
Corey	Kong	OSPR	562-477-7081
Christian	Corbo	OSPR	310-864-5299
Robert	Vega	LA WPD	213-485-3991
Steve	Pedersen	LA WPD	213-725-6308
Shahram	Kharaghani	LA WPD	213-485-0587
Steve	McQuay	LA WPD	213-300-3662
Bernie	Roger	LA WPD	213-359-4774
Vince	Sato	LA City	213-215-9087
Adel	Halekhalil	LA Sanitatior	213-485-2210
David	Cheung	LA Sanitatior	213-485-2423
Chris	Foley	POLA	310-732-3683
Chris	Cannon	POLA	310-732-3763
Martin	Ebel	Lockheed	412-889-2258
Tom	Tobin	NPS	
Robert	Hall	NPS	562-244-4313

Date: 12/28/2010

First Name	Last Name	Agency	Phone #
Anastasia	Norris	DFG/OSPR	310-310-9917
Diana	Lang	OLBI	562-624-3314
Charlie	Waters	OLBI	562-900-2347
Dean	Pershinger	OLBI	562-624-3284
Terry	Dickinson	City of LA San	213-610-6287
David	Duthie	ACTA	714-553-0246
Elaine	Silvestro	ACTA	310-650-3359
Randy	Stuart	BBRI	310-863-0912
Brett	Bernstein	Shell	213-494-6598
Victor	Cunton	Shell	310-782-5121
Mike	Caliguire	USCG PST	415-798-4521
Mike	Mejia	BBRI	310-863-0860
Gonzolo	Barriga	LA WPD	213-725-8862
Eric	Lee	LA WPD	213-725-8863
Martin	Powell	US EPA	562-760-7028
Thomas	Williams	State Fire Marsl	562-425-1902
Rafael	Aguiar	W.C.S.D Sanita	562-208-4363
Brian	McCormick	City of LA San	323-342-1577
Kyle	Armstrong	Crimson Pipelin	562-577-3558

Date: 12/27/2010

First Name	Last Name	Agency	Phone #
Pete	Ceniceros	L.A Sanitation	213-485-5879
Gaven	Cooter	AECOM	805-452-3523
Peter	James	HBC (?)	310-421-7025
Howard	Wong	City of L.A. WPD	213-725-6313
Deirdre	Wlliams	L.A. CoFD/HHMD	213-215-4278
Dion	Colliso	City of L.A. WPD	213-425-6300
Adam	Smith	EPA START	310405-2393
Jason	Schmidt	SPEC Services	714-316-3705
Louis	Nelson	BP	562-728-2789
Jason	Musante	US EPA	213-479-2120
James	Foto	DFG/OSPR	310-683-3032
Tom	Dahlgren	Warren E&P	562-307-7001
Freddie	Bizzell	USCG	415-717-4492
Sau	Garcia	CA DFG-OSPR/SOSC	562-843-2714
Jeremy	O'Neal	USCG	415-720-4178
George	Alvarez	Shell Oil	310-804-8615
Cesar	Zorrilla	DBES	562-965-4654
Randy	Stuart	BBRI	310-863-0912
Mike	Mejia	BBRI	310-863-0860
James	Ranuin	DBES	909-810-6626
Iona	Jorge	DBES	951-956-1277
Art	Garcia	DBES	909-800-8461
Jr	Rodriguez	BDES	951-385-7625
David	Dicamas (?)	AIS	323-974-9532
Thomas	Williams	State Pipeline Marshal F	562-425-1902
Anastasia	Norris	DFG/OSPR	310-310-9917
Garry	Kepes	BP	949-300-2666
Dash	Eskandaru (?)	BP	949-636-8220
Hal	Hammer	BP	562-755-8588
Marc	Trines (?)	BP	562-572-4055
Ray	Smith	ARB	949-279-0808
Corey	Kong	DFG/OSPR	562-477-7081
Wm	Short	ANCON/BP	310-864-1022
Kathleen	Andrews	CDOGGR	714-816-6847
Roy	Hernandez	ARB	949-795-1612
Pete	Lopez	ARB	949-289-0569
Robert	Ashbee Jr	ARB	562-254-1460
Robert	Casbee	ARB	562-256-4565
Victor	Garcia	ARB	562-843-3664
Aureliot	Lopez	ARB	310-631-2671
Matthew	Diener	USEPA START	310-310-0267
Julie	Skoglind	IBRRC	310-218-6825
Adam	Ribota	IBRRC	714-931-8343
Perkins	Bob	Warren E&P	310-505-6893
Carlos	Martinez	ACE Engineering, Inc	909-478-4088
Andrew	Nicholls	BBRI	310-863-0038
Dean	Persinger	OLBI	562-624-3284
Charlie	Waters	OLBI	562-900-2347
Jesse	Marquez	BBRI	310-863-0945
Elaine	Silvestro	ACTA	310-650-3359

Date: 12/27/2010

First Name	Last Name	Agency	Phone #
Brett	Bernstein	Shell	213-494-6598
Roy	Hernandez	A.R.B	949-795-1612
Eddie	Boyle	DBES	
Ken	Potts	DBES	
Robert	Hill	DBES	
Julian	Navarro	DBES	
Frank	Navaro	DBES	
Perez	Steven	IQ	
Mike	Ramirez	IQ Personnel	951-261-2994
James	Rankin		909-810-9626
Duane	Jones	BBRI	
Randy	Stuart		310-863-0912
Jr	Rodriguez	DBES	951-385-7629
George	Alvarez	Shell Oil	310-804-8615
Rob	Asbee	ARB	562-256-4565
Victor	Garcia	ARB	562-843-3664
Adam	Ribota	IBRRC	714-931-8343
Neil	Uelman	IBRRC	562-253-9073
Anasatsia	Norris	DFG/OSPR	310-310-9917
Freddie	Bizzell	USCG PST	415-717-4492
Jeremy	O'Neal	USCG PST	415-717-4492
Corey	Kong	DFG/OSPR	562-425-7081
Thomas	Williams	State Fire Marshal/Pipeline Safety	562-425-1902
Lito	Arambulo	LA WPD	213-725-6297
Susan	Berberabe (?)	LA WPD	213-272-8426
Dean	Persinger	OLBI	562-624-3284
Kathleen	Andrews	DOGGER	714-920-1009
Russell	Burlkhardt (?)	WEP	562-307-4928
Dan	Gabel	Tesoro	310-522-8602
Ken	Pacheco	Tesoro	310-522-6413
Mike	Kulakowski	Tesoro	310-522-6199
Vicki	Jansen	Tesoro	310-522-6222
Kim	Fowler	Tesoro	310-522-8603
David	Fuentes	Tesoro/W.A. Rasic	310-864-0497
Dion	Coluso	City of LA WPD	213-725-6300
Rafael	Aguiar	City of LA W.C.S.D Sanitation	562-208-4363

Date: 12/23/2010

First Name	Last Name	Agency	Phone #
Pete	Ceniceros	L.A Sanitation	213-485-5879
Gaven	Cooter	AECOM	805-452-3523
Peter	James	HBC (?)	310-421-7025
Howard	Wong	City of L.A. WPD	213-725-6313
Deirdre	Williams	L.A. CoFD/HHMD	213-215-4278
Dion	Colliso	City of L.A. WPD	213-425-6300
Adam	Smith	EPA START	310405-2393
Jason	Schmidt	SPEC Services	714-316-3705
Louis	Nelson	BP	562-728-2789
Jason	Musante	US EPA	213-479-2120
James	Foto	DFG/OSPR	310-683-3032
Tom	Dahlgren	Warren E&P	562-307-7001
Freddie	Bizzell	USCG	415-717-4492
Sau	Garcia	CA DFG-OSPR/SOSC	562-843-2714
Jeremy	O'Neal	USCG	415-720-4178
George	Alvarez	Shell Oil	310-804-8615
Cesar	Zorrilla	DBES	562-965-4654
Randy	Stuart	BBRI	310-863-0912
Mike	Mejia	BBRI	310-863-0860
James	Ranuin	DBES	909-810-6626
Iona	Jorge	DBES	951-956-1277
Art	Garcia	DBES	909-800-8461
Jr	Rodriguez	BDES	951-385-7625
David	Dicamas (?)	AIS	323-974-9532
Thomas	Williams	State Pipeline Marshal Pipeline Safety	562-425-1902
Anastasia	Norris	DFG/OSPR	310-310-9917
Garry	Kepes	BP	949-300-2666
Dash	Eskandaru (?)	BP	949-636-8220
Hal	Hammer	BP	562-755-8588
Marc	Trines (?)	BP	562-572-4055
Ray	Smith	ARB	949-279-0808
Corey	Kong	DFG/OSPR	562-477-7081
Wm	Short	ANCON/BP	310-864-1022
Kathleen	Andrews	CDOGGR	714-816-6847
Roy	Hernandez	ARB	949-795-1612
Pete	Lopez	ARB	949-289-0569
Robert	Ashbee Jr	ARB	562-254-1460
Robert	Casbee	ARB	562-256-4565
Victor	Garcia	ARB	562-843-3664
Aureliot	Lopez	ARB	310-631-2671
Matthew	Diener	USEPA START	310-310-0267
Julie	Skoglind	IBRRC	310-218-6825
Adam	Ribota	IBRRC	714-931-8343

Date: 12/22/2010

First Name	Last Name	Agency	Phone #
Brett	Bernstein	Shell (Asst Mgr)	213-494-6598
Thomas	Williams	State Fire Marshal Pipeline Safety	562-425-1902
Adam	Smith	USEPA START	310-405-2393
Maggie	Tymkow	USEPA START	310-701-0836
Anastasia	Norris	DFG/OSPR	310-310-9917
Bryan	Gollhofer	DFG/OSPR	562-708-7757
Kislev	Ang	LA City Watershed Protection	213-725-6296
Corey	Kong	DFG/OSPR	562-477-7081
Mario	Benjamin	LACoFD/HHMD	323-890-4317
Ernesto	Villaneal	Clean Harbors	310-722-1763
Jonathan	Hall	LAPD Hazmat	213-305-4059
Craig	Higa	LAPD Hazmat	213-926-0041
Garry	Kepes	BP USPL	949-300-2666
Don	Boroff	BP USPL	562-572-4009
John	Buck	LAFD	310-548-7516
Ed	Martin	LAFD	310-548-7516
Jason	Musante	USEPA	213-479-2120
Erik	Ricarro	DBES	909-499-6959
Louis	Finla (?)	EQM	562-243-1213
Dean	Matsuoka	BDES	951-241-6909
Eric	Pedrosa	PPC	562-531-2060
Greg	Barela	Paramount	5627 ext 2715
Gonzalo	Barriga	LA WPD	213-725-8862
Howard	Wong	LA WPD	213-725-6313
Dean	Persinger	THUMS	562-624-3284
Rey	Navarro	THUMS	562-624-3501
Roshanzamir	Amir	THUMS	562-624-3501
LCDR Chris	Boes	USCG	310-809-1579
Kim	Fowler	Tesoro	424-261(201?)-9437
James	Foto	DFG/OSPR	310-683-3032
Deirdre	Williams	LACoFD/HHMD	213-215-4278
Kathleen	Andrews	CA Div Oil & Gas	714-816-6847
Freddie	Bizzell	USCG	415-717-4492
Jeremy	O'Neal	USCG	415-720-4178
John	Rifilato	Plains	562-216-3863
Matthew	Diener	USEPA START	310-310-0267

Date: 12/21/2010

First Name	Last Name	Agency
Gonzalo	Barriga	LA WPD
Deirdre	Williams	LACoFD/HHMD
Many	Bendamin	LACoFD/HHMD
Frankie	Ramirez	BP
Dan	Gabel	Tesoro
Marcus	Garvey	Paragon Partners for the Joint Ports
Mike	Majia	Balfour Beatty Rail
Mario	Bentamin	LACoFD/HHMD
Anastasia	Norris	DFG/OSPR
Paul	Hafemann	Shell Plant Mgr
James	Davis	LAPD Hazmat
Craig	Higa	LAPD Hazmat
Ray	Gomez	LAFD
Rich	Durup	LA City Att. Inv.
Thomas	Williams	State Fire Marshal
Jeff	DeRonde	USCG
Corey	Kong	DFG/OSPR

Phone #
213-725-8862
562-572-3994
310-522-8602
714-379-3376 x233
310-863-0945
323-890-4317
310-310-9917
310-938-3507
213-926-8178
213-926-0041
310-548-7516
818-398-7383
562-425-1902
310-521-3780
562-477-7081

Waste Segregation and Quantification Plan

Date: January 14, 2011

Incident Name: Dominguez Channel Mystery Oil Spill

Location Latitude: 33.785010, Longitude: -118.2372450

OBJECTIVE

To facilitate proper disposal and quantification of recovered pollutant generated from response and recovery operations associated with the incident named above.

WASTE STREAM SEPARATION

Recovered pollutant shall be separated by waste stream type and location where the waste was recovered. **Pollutants recovered from Waters of the State shall be kept separate from pollutants recovered elsewhere.**

Liquids: Liquids shall be held in secure tanks for gauging to determine oil content by DFG and Responsible Party representatives prior to disposal. In order to expedite cleanup and disposal, a direct assessment of the contents can be made, or a representative sample may be analyzed by the TSD Facility. Liquids recovered during flushing or steaming and Decontamination operations should be kept separate from recovered free floating oil.

Solids: Recovered pollutant held in solids will be placed onto roll-off bins or over-pack drums with tare weights. Solids shall be segregated as follows; sorbents, debris (oiled), soil, or PPE. Solids recovered from Waters of the State or adjacent shorelines shall be stored separate from those recovered elsewhere.

Vegetation/Wildlife: Vegetation and/or wildlife removed in the cleanup operation will be bagged and weighed separately.

QUANTIFICATION

Quantification of recovered pollutants will be conducted in accordance with California Code of Regulations Title 14, Section 877. The Responsible Party and the Department of Fish and Game may stipulate to the amount of oil spilled and/or recovered. The amount of recovered pollutant can be determined by visual assessment by DFG and responsible party or by lab analysis of samples taken in the presence of DFG and responsible party representatives.

FINAL DISPOSAL

When quantification is final, the waste may be disposed of in accordance with all Federal, State, and Local laws. A copy of the Hazardous Waste Manifest and associated documents shall be provided to the DFG as proof of disposal.

INCIDENT NAME: Dominguez Channel Mystery Oil Spill

The following table indicates the types of waste to segregate. Place a checkmark in the appropriate box for this incident. This plan should be included in the IAP.

Waters of the State of California			
Liquids		Solids	
Free Floating Product		Sorbent materials	
Flushing and/or Steam Cleaning		Vegetation / Sediment	
Decontamination		Impacted Wildlife	
		Oiled Trash & Debris	
		PPE	
		Response Materials	
Non-Waters of the State			
Liquids		Solids	
Recovered on property	✓	Sorbent Boom/Pads	✓
Recovered off property		Vegetation / Soils	
W/I 2ndry containment		Impacted Wildlife	
Product from Source		Oiled Trash & Debris	✓
Steam Cleaning		PPE	✓
Decontamination	✓	Response Materials	✓

Comments: _____

ATTACHMENT A
MATERIAL SAFETY DATA SHEETS

Crude Oil (Sour)

NFPA 704 (Section 16)

AMERADA HESS CORPORATION

MATERIAL SAFETY DATA SHEET

Crude Oil (Sour) **MSDS No. 6608**

1. CHEMICAL PRODUCT and COMPANY INFORMATION (rev. Jan-99)

Amerada Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

EMERGENCY TELEPHONE NUMBER (24 hrs): **CHEMTREC** **(800) 424-9300**
COMPANY CONTACT (business hours): Corporate Safety (732) 750-6000

SYNONYMS: Crude Petroleum; Sour Crude

See Section 16 for abbreviations and acronyms.

2. COMPOSITION and INFORMATION ON INGREDIENTS (rev. Jan-99)

INGREDIENT NAME	EXPOSURE LIMITS	CONCENTRATION PERCENT BY WEIGHT
Petroleum Oil CAS NUMBER: 8002-05-9	OSHA PEL-TWA: 5 mg/m^3 as mineral oil mist ACGIH TLV-TWA: 5 mg/m^3 as mineral oil mist* *1997 NOIC: sum of 15 NTP-listed polynuclear aromatic hydrocarbons 0.005 mg/m^3, A1	100
Hydrogen Sulfide (H_2S) CAS NUMBER: 7783-06-4	OSHA PEL-Ceiling/Peak: 20 / 50 ppm ACGIH TLV-TWA/STEL: 10 / 15 ppm	< highly variable - see below >
Benzene CAS NUMBER: 71-43-2	OSHA PEL-TWA/STEL: 1 / 5 ppm ACGIH TLV-TWA: 0.5 / 2.5 ppm, A1, skin US Coast Guard: same as OSHA	Variable AP 0.1 to 1.0

A natural product derived from various oil production field primarily consisting of a complex combination of paraffinic and aromatic hydrocarbons and small amounts of nitrogen and sulfur compounds.

Crude oils are generally referred to as "sour" if they can release dissolved hydrogen sulfide (H_2S) which could result in a hazardous condition. The amount of dissolved H_2S can vary considerably with the crude oil source. Some sour crude oils can have an appreciable percentage of H_2S.

3. HAZARDS IDENTIFICATION (rev. Jan-99; Tox 99)

EMERGENCY OVERVIEW

CAUTION!

FLAMMABLE LIQUID - MAY EVOLVE TOXIC AND FLAMMABLE HYDROGEN SULFIDE GAS - SLIGHT TO MODERATE IRRITANT - EFFECTS CENTRAL NERVOUS SYSTEM - HARMFUL OR FATAL IF SWALLOWED

High fire hazard. Keep away from heat, spark, open flame, and other ignition sources.

HYDROGEN SULFIDE (toxic gas) may be released. High concentration may cause immediate unconsciousness - death may result unless victim is promptly and successfully resuscitated. Hydrogen sulfide causes eye irritation.

If ingested, do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs). Contact may cause eye, skin and mucous membrane irritation. Avoid prolonged breathing of vapors or mists. Inhalation may cause irritation, anesthetic effects (dizziness, nausea, headache, intoxication), and respiratory system effects.

Long-term exposure may cause effects to specific organs, such as to the liver, kidneys, blood, nervous system, and skin. Contains benzene, which can cause blood disease, including anemia and leukemia.

EYES

Contact with eyes may cause moderate to severe irritation.

SKIN
Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly. Rare, precancerous warts on the forearms, backs of hands and scrotum have been reported from prolonged or repeated skin contact.

INGESTION
The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

INHALATION
Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: Irritating and toxic hydrogen sulfide gas may be found in confined vapor spaces. Greater than 15 - 20 ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50 - 500 ppm can cause headache, nausea, and dizziness, loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500 ppm can cause rapid or immediate unconsciousness due to respiratory paralysis and death by suffocation unless the victim is removed from exposure and successfully resuscitated.

The "rotten egg" odor of hydrogen sulfide is not a reliable indicator for warning of exposure, since olfactory fatigue (loss of smell) readily occurs, especially at concentrations above 50 ppm. At high concentrations, the victim may not even recognize the odor before becoming unconscious.

CHRONIC and CARCINOGENICITY
Similar products produced skin cancer and systemic toxicity in laboratory animals following repeated applications. This product contains polynuclear aromatic hydrocarbons which have been shown to be carcinogenic in laboratory animals after repeated and prolonged skin contact. The significance of these results to human exposures has not been determined - see Section 11, Toxicological Information.

Contains benzene, a regulated human carcinogen. Benzene has the potential to cause anemia and other blood diseases, including leukemia, after repeated and prolonged exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash). Pre-existing, chronic respiratory disease, liver or kidney dysfunction, or central nervous system disorders may be aggravated by exposure.

4. FIRST AID MEASURES (rev. Jan-99; Tox-99)

EYES
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

SKIN
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

INGESTION
DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

INHALATION
Remove person to fresh air. If person is not breathing provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES (rev. Oct-94)

FLAMMABLE PROPERTIES:

FLASH POINT:	< 73 to > 200 °F (< 23 to > 93 °C)
AUTOIGNITION TEMPERATURE:	N/D
OSHA/NFPA FLAMMABILITY CLASS:	1B (flammable liquid)
LOWER EXPLOSIVE LIMIT (%):	N/D
UPPER EXPLOSIVE LIMIT (%):	N/D

FIRE AND EXPLOSION HAZARDS
Flash point and explosive limits are highly dependent on the crude oil source. Treat as an OSHA/NFPA flammable liquid unless otherwise indicated. Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

EXTINGUISHING MEDIA
SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or Halon.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

FIRE FIGHTING INSTRUCTIONS
Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

See Section 16 for the NFPA 704 Hazard Rating.

6. ACCIDENTAL RELEASE MEASURES (rev. Jan-99)

ACTIVATE FACILITY'S SPILL CONTINGENCY OR EMERGENCY RESPONSE PLAN.

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Hydrogen sulfide may be evolved during a release - ensure response personnel are adequately protected - see Section 8.

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system

is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Response and clean-up crews must be properly trained and must utilize proper protective equipment.

7. HANDLING and STORAGE (rev. Jan-99)

HANDLING PRECAUTIONS

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

STORAGE PRECAUTIONS

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Hydrogen sulfide may accumulate in tanks and bulk transport compartments. Consider appropriate respiratory protection (see Section 8). Stand upwind. Avoid vapors when opening hatches and dome covers. Confined spaces should be ventilated prior to entry.

WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

Naturally Occurring Radioactive Materials (NORM):

Industry experience indicates that this material may contain small amounts of naturally-occurring uranium, thorium, and their decay products (NORM) which can accumulate in oil production and process equipment, particularly the equipment handling the water associated with crude oil production. Scales, other deposits, and sludges from this equipment may have a significant accumulation of NORM. Gamma radiation above background may be detected external to equipment contaminated with NORM. Production equipment should be assessed for external gamma radiation; access may need to be restricted in accordance with OSHA 29 CFR 1910.96 during operation. Such equipment should also be assumed to be internally contaminated with long half-life decay products that emit alpha radiation, which is a hazard if inhaled or ingested. Unless measurements indicate otherwise, steps should be taken to minimize skin and inhalation exposure to NORM dusts/mists by wearing personal protective clothing [such as disposable Tyvek ® (DuPont)], utilizing respiratory protection (minimum of HEPA filter), and practicing good personal hygiene. Please refer to API Bulletin E2, "Bulletin on Management of Naturally Occurring Radioactive Materials in Oil and Gas Production," April 1, 1992, for additional information on managing NORM.

8. EXPOSURE CONTROLS and PERSONAL PROTECTION (rev. Jan-99)

ENGINEERING CONTROLS

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

EYE/FACE PROTECTION
Safety glasses or goggles are recommended where there is a possibility of splashing or spraying

SKIN PROTECTION
Gloves constructed of nitriie, neoprene, or PVC are recommended. Chemicai protective clothing such as of E.I. DuPont Tyvek QC®, Saranex®, TyChem® or equivaient recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information

RESPIRATORY PROTECTION
If a hydrogen sulfide hazard is present (that is, exposure potential above H_2S permissible exposure limit), use a positive-pressure SCBA or Type C supplied air respirator with escape bottle.

Where it has been determined that there is no hydrogen sulfide exposure hazard (that is, exposure potential below H_2S permissible exposure limit), a NIOSH/ MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL and CHEMICAL PROPERTIES (rev. Oct-94)

APPEARANCE
Variable depending on its source; typical is a thick, dark yellow to brown or greenish black liquid

ODOR
A characteristic, petroleum/asphalt-type odor

Hydrogen sulfide (H_2S) has a rotten egg "sulfurous" odor. This odor should not be used as a warning property of toxic levels because H_2S can overwhelm and deaden the sense of smell. Also, the odor of H_2S in heavy oils can easily be masked by the petroleum-like odor of the oil. Therefore, the smell of H_2S should not be used as an indicator of a hazardous condition - a H_2S meter or colorimetric indicating tubes are typically used to determine the concentration of H_2S.

BASIC PHYSICAL PROPERTIES
The properties of crude oil are highly variable depending on its source.

BOILING RANGE:	AP 100 - 1000+ °F (> 260 °C)
VAPOR PRESSURE:	Variable
VAPOR DENSITY (air = 1):	3 - 5 typical
SPECIFIC GRAVITY (H_2O = 1):	AP 0.7 to 0.9 (varies)
PERCENT VOLATILES:	Variable
EVAPORATION RATE:	Variable
SOLUBILITY (H_2O):	Insoluble to slightly soluble

10. STABILITY and REACTIVITY (rev. Oct-94)

STABILITY: Stable. Hazardous polymerization will not occur.

CONDITIONS TO AVOID and INCOMPATIBLE MATERIALS
Material is stable under normal conditions. Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

11. TOXICOLOGICAL PROPERTIES (rev. Jan-99; Tox-99)

CHRONIC EFFECTS AND CARCINOGENICITY

Carcinogenicity: **OSHA:** NO **IARC:** NO **NTP:** NO **ACGIH:** 1997 NOIC: A1
Dermal carcinogenicity: positive - mice

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

MUTAGENICITY (genetic effects)

Some crude oils and crude oil fractions have been positive in mutagenicity studies.

12. ECOLOGICAL INFORMATION (rev. Jan-99)

Keep out of sewers, drainage and waterways. Report spills and releases, as applicable, under Federal and State regulations.

13. DISPOSAL CONSIDERATIONS (rev. Jan-99)

Consult federal, state and local waste regulations to determine appropriate disposal options.

14. TRANSPORTATION INFORMATION (rev. Jan-99)

PROPER SHIPPING NAME:	PETROLEUM CRUDE OIL
HAZARD CLASS; PACKING GROUP:	3; determine flash point to accurately classify packing group
DOT IDENTIFICATION NUMBER:	UN 1267
DOT SHIPPING LABEL:	FLAMMABLE LIQUID

15. REGULATORY INFORMATION (rev. Jan-99)

U.S. FEDERAL, STATE and LOCAL REGULATORY INFORMATION

This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.

CLEAN WATER ACT (OIL SPILLS)

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow-up to the National Response Center, as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

SARA SECTION 311/312 - HAZARD CLASSES

ACUTE HEALTH	CHRONIC HEALTH	FIRE	SUDDEN RELEASE OF PRESSURE	REACTIVE
X	X	X	-	-

SARA SECTION 313 - SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

INGREDIENT NAME (CAS NUMBER)	CONCENTRATION WT. PERCENT
Benzene (71-43-2)	0.1 to 1.0

CANADIAN REGULATORY INFORMATION (WHMIS)

Class B, Division 2 (flammable liquid)
Class D, Division 1A (Very toxic, acute)
Class D, Division 1B (Very toxic by other means)

16. OTHER INFORMATION (rev. Feb-00)

NFPA® HAZARD RATING	HEALTH:	2	Moderate
	FIRE:	3	High
	REACTIVITY:	0	Negligible
HMIS® HAZARD RATING	HEALTH:	3*	High
	FIRE:	3	High
	REACTIVITY:	0	Negligible
			*Chronic

SPECIAL HAZARDS: May release toxic hydrogen sulfide (poison gas).

SUPERSEDES MSDS DATED: 01/27/99

ABBREVIATIONS:

AP = Approximately < = Less than > = Greater than
N/A = Not Applicable N/D = Not Determined ppm = parts per million

ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists
AIHA	American Industrial Hygiene Association
ANSI	American National Standards Institute (212) 642-4900
API	American Petroleum Institute (202) 682-8000
CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation [General Info: (800)467-4922]
EPA	U.S. Environmental Protection Agency
HMIS	Hazardous Materials Information System
IARC	International Agency For Research On Cancer
MSHA	Mine Safety and Health Administration
NFPA	National Fire Protection Association (617) 770-3000
NIOSH	National Institute of Occupational Safety and Health
NOIC	Notice of Intended Change (proposed change to ACGIH TLV)
NTP	National Toxicology Program
OPA	Oil Pollution Act of 1990
OSHA	U.S. Occupational Safety & Health Administration
PEL	Permissible Exposure Limit (OSHA)
RCRA	Resource Conservation and Recovery Act
REL	Recommended Exposure Limit (NIOSH)
SARA	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	Self-Contained Breathing Apparatus
SPCC	Spill Prevention, Control, and Countermeasures
STEL	Short-Term Exposure Limit (generally 15 minutes)
TLV	Threshold Limit Value (ACGIH)
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average (8 hr.)
WEEL	Workplace Environmental Exposure Level (AIHA)
WHMIS	Canadian Workplace Hazardous Materials Information System

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

Initial Site Safety Plan
Project Name: Dominguez Channel Mystery Oil Spill

ICS KEY PERSONNEL - NRCES		
Project Manager	**Mike Sica**	310-628-0725
Project Supervisor	**Jim Kiatos**	310-628-1211
Regional Health & Safety Mgr	**Aimee Wilson**	310-629-1190
Safety Director	**Mike Amen, CIH, CSP, CHMM**	503-978-7297

...

Date: **1.17.11** **Start Time: 0700** **Job Number: 56448**

☒ **Land Emergency Response** ☐ **Marine Emergency Response** ☐ **: Land Service** ☐ **Marine Service**

SITE DESCRIPTION	This site specific health and safety plan has been developed to provide a safe work environment for the contracted work to be performed at Leeds Avenue near the intersection with Grant Street in Wilmington, California.

SCOPE OF WORK	. Site Orientation prior to work assignment (layout, ingress; egress; emergency evac, phones) . Preventive booming: containment of liquids on the surface of the water to prevent migration into open water . Continue recovery of surface product . Follow waste segregation & recovery plan and keep separate from other wastes . Maintain established temporary sand bag containment pond . Continue skimming and recovery efforts to minimize downstream impacts to pump station . Assess cleanup issues to implement once source has been isolated

EQUIPMENT	• Pickup truck • Gear truck • Generator • Weir skimmer • Air compressor • 3" pump & hoses • Light tower • 4" trash pump • Baker tanks • Vacuum trucks • Emergency response trailer • Rocket launcher • Roll off bins • Combustible gas indicator (4 gas meter) w/ PID

CHEMICAL INFORMATION (see MSDS)

CHEMICAL / CAS	CHEMICAL PROPERTIES	EXPOSURE LIMITS	ROUTES OF ENTRY	SYMPTOMS
Crude Oil (sour)	☐ VD = 3 - 5 ☐ VP = variable ☐ S.G. = AP 0.7 to 0.9 ☐ FP = <73 to >200 F	PEL: 5 mg/m³ as mineral oil mist	Inhalation Ingestion	Eye, nose and throat irritation, vertigo, nausea, dyspnea, central
Benzene	☐ S.G. = 0.88 ☐ VP = 75mmHg ☐ FP = 12 F ☐ LEL: 1.2% ☐ UEL = 7.8%	PEL: 1 ppm IDLH: 500ppm	☐ Contact ☐ Inhalation ☐ Ingestion ☐ Absorption	Irrit eyes, skin, nose, resp sys; dizz; head, nau, staggered gait; anor, lass; derm; bone marrow depress;
Hydrogen Sulfide	☐ MW = 34.1 ☐ Sol = 0.4% ☐ IP 10.4 6eV ☐ UEL = 44% ☐ LEL = 4.0%	PEL: 20 ppm IDLH: 100ppm	☐ Inhalation ☐ Contact	Irrit eyes, resp sys; apnea, coma, convuls; conj, eye pain, lac, photo; dizz, head

PERSONAL PROTECTIVE EQUIPMENT

TASK	Level	MASK /CARTRIDGE /AIR	ADDITIONAL PPE
Establish support area / prepare	**D**	N/A	Hardhats, safety glasses, nomex coveralls, tyvek coveralls, leather gloves, PVC steel toe boots
Preventive Booming	**D**	N/A	Hardhats, safety glasses, tyvek coveralls, leather gloves, PVC steel toe boots, PFD.
Operator – Vac Truck	**D**	N/A	Hardhats, full-face shields, safety glasses, hearing protection, coveralls, neoprene outer gloves, PVC steel toe boots, high visible traffic vests
Load / transport material	**D**	N/A	Hardhats, safety glasses, tyvek coveralls, nitrile liner gloves, steel toe boots, high visible traffic vests
Decontaminate equipment	**D**	N/A	Hardhats, full-face shields, safety glasses, poly coated tyvek coveralls, neoprene outer gloves, nitrile liner gloves, PVC steel toe boots
Confined Space Entrants – NOT ANTICIPATED AT THIS SITE	**B**	Full-face air positive pressure demand respirator	Hardhat, safety glasses, nomex coveralls, nitrile steel toe boots, nitrile liners, pvc gloves, full body harness, retrieval winch set up, safety/rescue line for winch retrieval

ACTIVITY HAZARD ANALYSIS

Hazards Throughout the Job		
ITEM	**HAZARD**	**PREVENTION**
General Work Area	Slip / trip / fall	• designated pathways cleared of debris • use step ladders for platforms requiring climbing up or down • see attached safety memo regarding climbing on ladders/equip
General Work Area –lifting	Strain	• plan and stage to minimize long distance carrying • split heavy loads into smaller loads • use assistant for heavy or awkward load
General Work Area –Traffic	Struck by	• Set up visible barricades on access roads; • Wear high visibility safety vests
Refueling Equipment	Fire Spill	• Flammable liquids in explosion proof containers • No flammable liquids or gas stored in unmarked containers • Fire extinguisher near refueling and storage areas • Area in front of extinguishers kept clear • Spill containment plan discussed and in place
Heat stress	Heavy PPE Lack of breeze	• Drink plenty of fluids
Traffic	Struck by	• Set up visible barricades • Only authorized NRCES personnel in work zones

....

Hazards Unique to Each Phase of Project		
ITEM	**HAZARD**	**PREVENTION**
Trains on active railway	Struck by train Uneven walking surface	• Must have flagger present at all times to grant access to walk near railway • Reflective orange safety vests must be worn • Must maintain a minimum distance of 25' from track • Use caution while walking on rocky surface • Ensure steel toe boots are laced up and secure on ankle
Load containment materials	Material	• plan and stage to minimize long distance lifting /carrying

Hazards Unique to Each Phase of Project		
into drop boxes	handling	• split heavy loads into smaller loads • use mechanical lifting aids when possible • have assistant for heavy or awkward loads
Transport absorbent boom materials to and from work sites	Lifting Strain	• Do not fill bags completely full • buddy system for awkward loads
FLAMMABLE LIQUIDS	Smoking/ignition source	• Post NO SMOKING signs around spill site/keep public out of work zone
Low visibility	No sunlight	• Set up light towers • Use head lamps on hard hats if needed
Liquid Pumping / agitation Into vacuum truck	Static Contact Liquid Spill	• Bond and ground vacuum truck • Bond and ground tank during cleaning / pumping • Intrinsically safe equipment • Spill containment plan discussed and in place during all cleaning operations • Operator present at all times
Air monitoring	Inhalation Over exposure	• Ensure current calibration • Fresh air calibration • Bump test • MUST have (1) 4 gas meter per group in skiffs/vessels
Confined Space – NOT ANTICIPATED AT THIS SITE	Atmosphere Rescue Ventilation	NRCES confined space permit for each entry. NRCES rescue /retrieval equipment in *Safety Required Sec.* *Note that this is horizontal rescue so may require wrist bands also*
Confined Space Entry - NOT ANTICIPATED AT THIS SITE	Hazardous Atmosphere Slips Trips Falls Illumination Opening of manhole	• A confined space permit will be filled out by the supervisor prior to each entry at a new location. • Pre-entry air monitoring will be conducted to confirm a non-hazardous atmosphere. • Continuous air monitoring will be conducted by the hole watch and documented on NRCES' air monitoring log • Forced air ventilation will be maintained • All vertical entries will be made with the use of a winch and attendant. • Three Points of contacts at all times when ascending or descending ladders • Lower and raise equipment in buckets / ropes • Any employee who participates in confined space entry has been trained in accordance with 29 CFR 1910.146 and 8 CCR 515. • Good housekeeping practices will be maintained during entry. Ensure there are not any items sitting below the ladder that could pose a tripping hazard. • Intrinsically safe flash lights & lights will be used to increase visibility in confined spaces • When opening is removed, a "hole watch" will be posted at that position until the cover is replaced. • Prior to entry, the confined space supervisor will fill out the confined space permit.

SAFETY EQUIPMENT REQUIRED:

✓	Eyewash / Shower	✓	Decon Pool / Supplies	✓	Wheel chocks for trucks
✓	First Aid Kit	✓	Fire Extinguisher (A/B/C)	✓	4 Way air monitoring instrument
✓	Reflective orange vest	✓	Barricades / rope	✓	Ladder

TRAINING REQUIREMENTS:

✓	HAZWOPER 40 / 24	✓	Hazwoper Supervisor	✓	Current 8 Hour Refresher
✓	First Aid /CPR	✓	Hazard Communication	✓	Incident Command System

DECONTAMINATION AND DISPOSAL

DECONTAMINATION EQUIPMENT	
☒ Visqueen (Ground)	☒ Rags to wipe boot bottoms
☒ Carpet Strips (Ground)	☒ Labeled Drums for disposal items
☒ Decon Pool / wash boots	☒ chairs to sit on for PPE removal
	☒ Soap /Water to wash face / hands
	☒ Disposable Paper Towels
	☒ Caution tape to designate decon area

PERSONNEL DECONTAMINATION PLAN

- ☐ Establish three stage contamination reduction zone with small decon area at exit
- ☐ Lay down visqueen under barrier
- ☐ Place empty lined and labeled drums for contaminated PPE
- ☐ Untape gloves and boots
- ☐ Rinse boots if not using boot covers
- ☐ Sit on chair prior to removing boots or outer PPE
- ☐ Remove boots and outer gloves ;
- ☐ dispose of tape / boots / gloves in labeled drum
- ☐ Unzip suit / pull off hood (if hooded)
- ☐ Roll down suit / inside out and place into labeled container: DO NOT USE KNIVES TO CUT OFF PPE
- ☐ Remove inner gloves
- ☐ PPE and debris will be bagged, accounted for, and bulked into the applicable waste bin

EMERGENCY MEDICAL TREATMENT AND FIRST AID

TYPE CONTACT	FIRST AID
Eyes	• Flush each eyes continuously for 15 minutes; • Tilt head to side to ensure liquid runs onto floor not other eye • refer to EMT for evaluation
Skin	• Remove contaminated clothing immediately • Wash skin continuously for 15 minutes; • refer to physician if redness, swelling, or pain persists after washing
Breathing	• Call 911; • Remove to fresh air immediately; • begin CPR until EMT arrives
Ingestion	• aspiration hazard • do not induce vomiting • do not give anything by mouth

EMERGENCY RESPONSE PLAN
Attach Map to Nearest Hospital

ELEMENT	LOCATION, SPECIFICATION OR REASON FOR USE
NEAREST HOSPITAL	Pacific Hospital of Long Beach 2776 E Pacific Ave. Long Beach, CA 90806
NEAREST PHONE	Supervisor cell phone
FIRST AID KIT	Supervisor Truck
FIRE EXTINGUISHER	Supervisor truck and charged extinguishers on site
EYEWASH STATION AND EMERGENCY SHOWER	Supervisor will determine location on site or provide 55 gallon drum of water and hand pump
EVACUATION ROUTE / MEETING POINT	To be discussed and diagramed before start of job scope

ACCIDENT / INCIDENT REPORTING

NRCES Notification Requirements	
FIRST AID INJURIES REQUIRING MEDICAL TREATMENT VEHICLE ACCIDENT NEAR MISS	▪ Employees immediately report all accidents or incidents to the Site Project Manager / Safety Officer ▪ Site Project Supervisor will immediately notify the NRCES Project Manager via cell phone. ▪ If unable to reach the Project Manager, contact the NRCES Operations or NRCES Safety Manager. ▪ Call their cell phones ▪ Safety Manager will provide employee disposition guidelines and coordinate an accident investigation either by himself or Project Supervisor ▪ NRCES Project Manager will relay Information to Project Site Superintendent ▪ Accident reporting forms are available electronically ▪ Report all incidents to NRCES Safety Director ▪ Ensure incident documented on Daily Safety Meeting Form ▪ Determination will be made regarding need for post accident drug testing

SAFETY PLAN APPROVAL

Site Safety Officer_____ **Date** _____

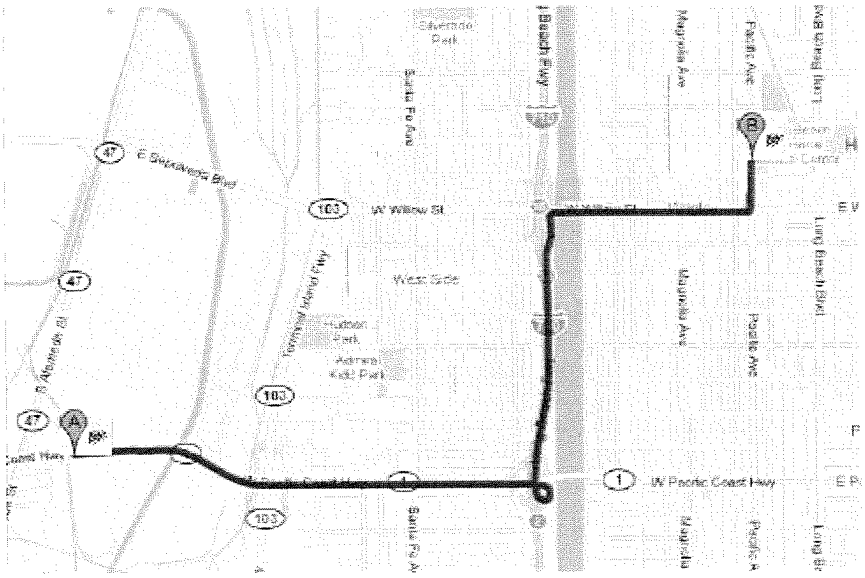
ACKNOWLEDGMENTS

I have read and understand the topics outlined on all pages of this HASP and will follow all the required safety rules.
****I am aware that I am to sign in at the beginning of the shift and sign out at the end of my shift on the daily safety meeting form.**
I must notify the on site supervisor of any injury /accident/ near miss that I had or observed during my shift**
I understand that I have the right to stop work and report any potential hazards to the NRCES Site Supervisor.
After an injury/accident/near miss is reported, the Site Supervisor must call the H & S Manager at 310-629-1190.

Date	Print Name	Signature

ATTACHMENT B

Medical Facilities



A 1926 E Pacific Coast Hwy, Los Angeles, CA 90744

1	1. Head east on CA-1 S About 2 mins	go 1.7 mi total 1.7 mi
710	2. Slight right to merge onto I-710 N toward Pasadena About 1 min	go 1.0 mi total 2.7 mi
	3. Take exit 3A for Willow St E	go 0.2 mi total 3.0 mi
	4. Merge onto W Willow St About 2 mins	go 0.7 mi total 3.7 mi
	5. Turn left at Pacific Ave Destination will be on the right About 1 min	go 0.2 mi total 3.9 mi

B 2776 Pacific Ave, Long Beach, CA 90806

Dominguez Channel Mystery Oil Spill
Emergency Rain Event Notifications

- Steve McQuay, DWP Sanitation Supervisor, City of Los Angeles Pump Station Operator
  24-Hour Notification: 213-300-3662
  Alternates:
  Howard Wong: 213-725-6313
  Steven Pedersen: 213-725-6308

- NRC Environmental
  24-Hour Notification: 1-800-337-7455
  Alternates:
  Michael Sica: 310-628-0725
  Jim Kiatos: 310-628-1211

- Randy Stuart, Balfour Beatty Rail for RR Crossing Access
  24-Hour Notification: 310-863-0912
  Mike Mejia for all TV events: 310-863-0860

- Tesoro Tower/Shell Sump Valve Operation
  310-522-8665 (if no answer will roll over to cell phone for on-call person)

- Steven Pedersen, LA City (Courtesy Call): 213-725-6308
  Alternates:
  Joe Fortaleza: 213-725-6304
  Tri Tran: 213-725-6306

- OSC Marty Powell, EPA: 562-760-7028

Jan. 17, 2011